



RECOMMENDER SYSTEMS THROUGH FASHION

FINDING THE RIGHT FASHION
FOR EACH INDIVIDUAL

HUMBERTO CORONA
@TOTOPAMPIN

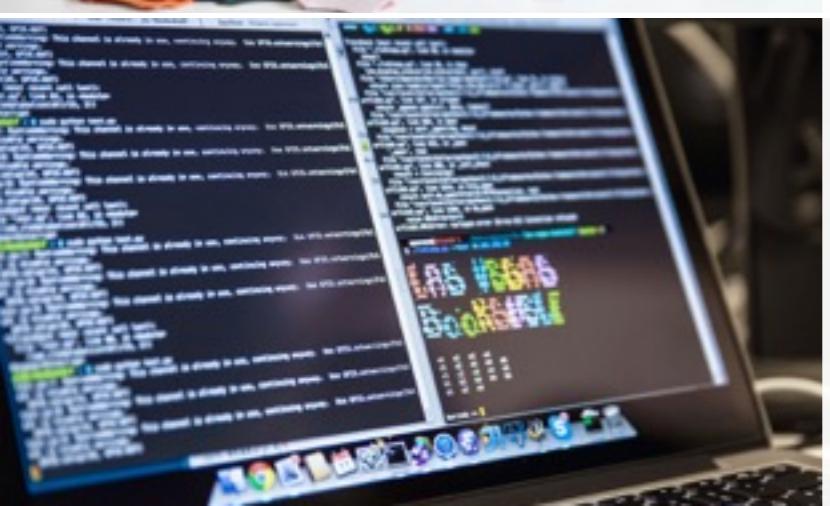


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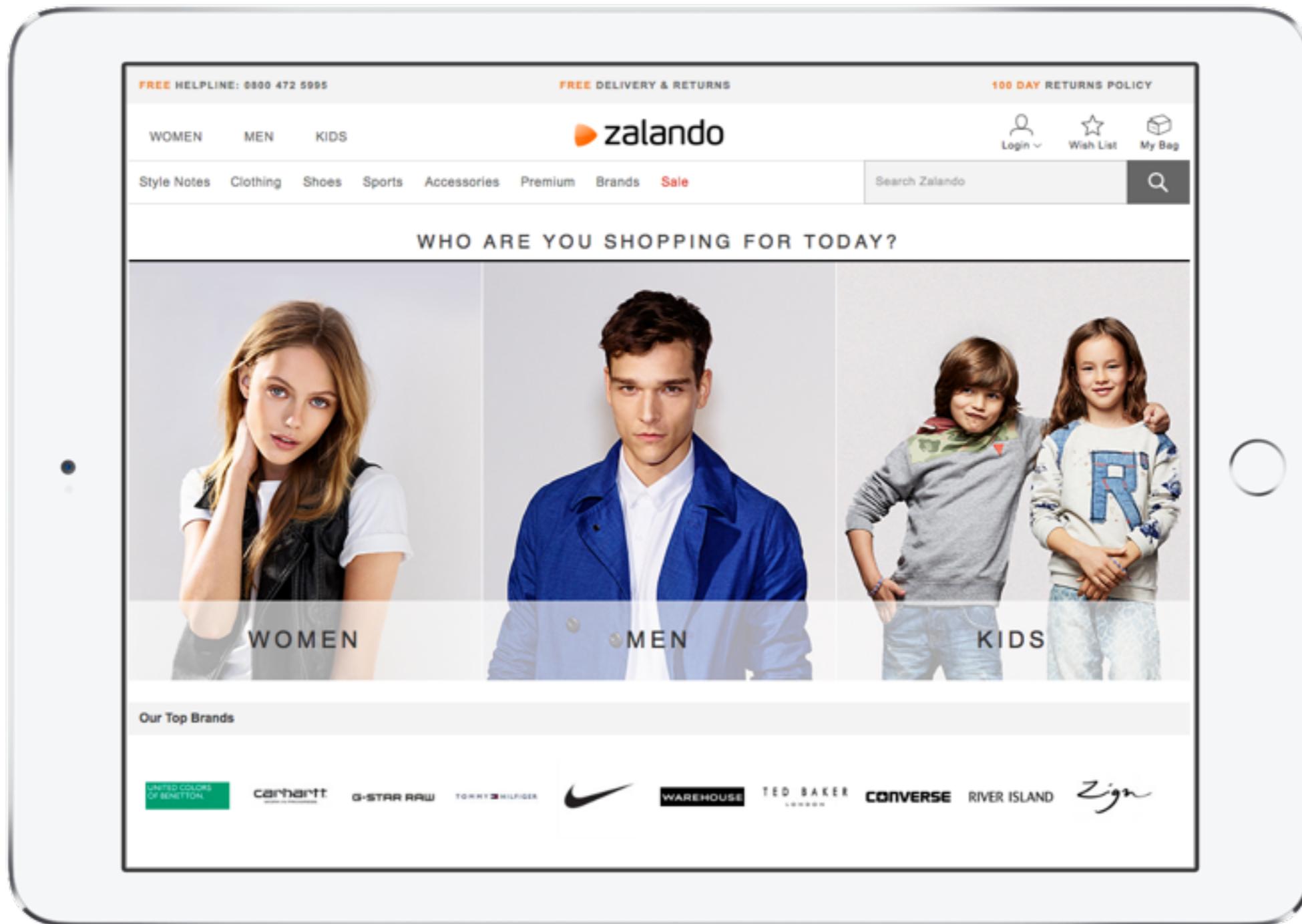
curated recommendations

content-based recommendations

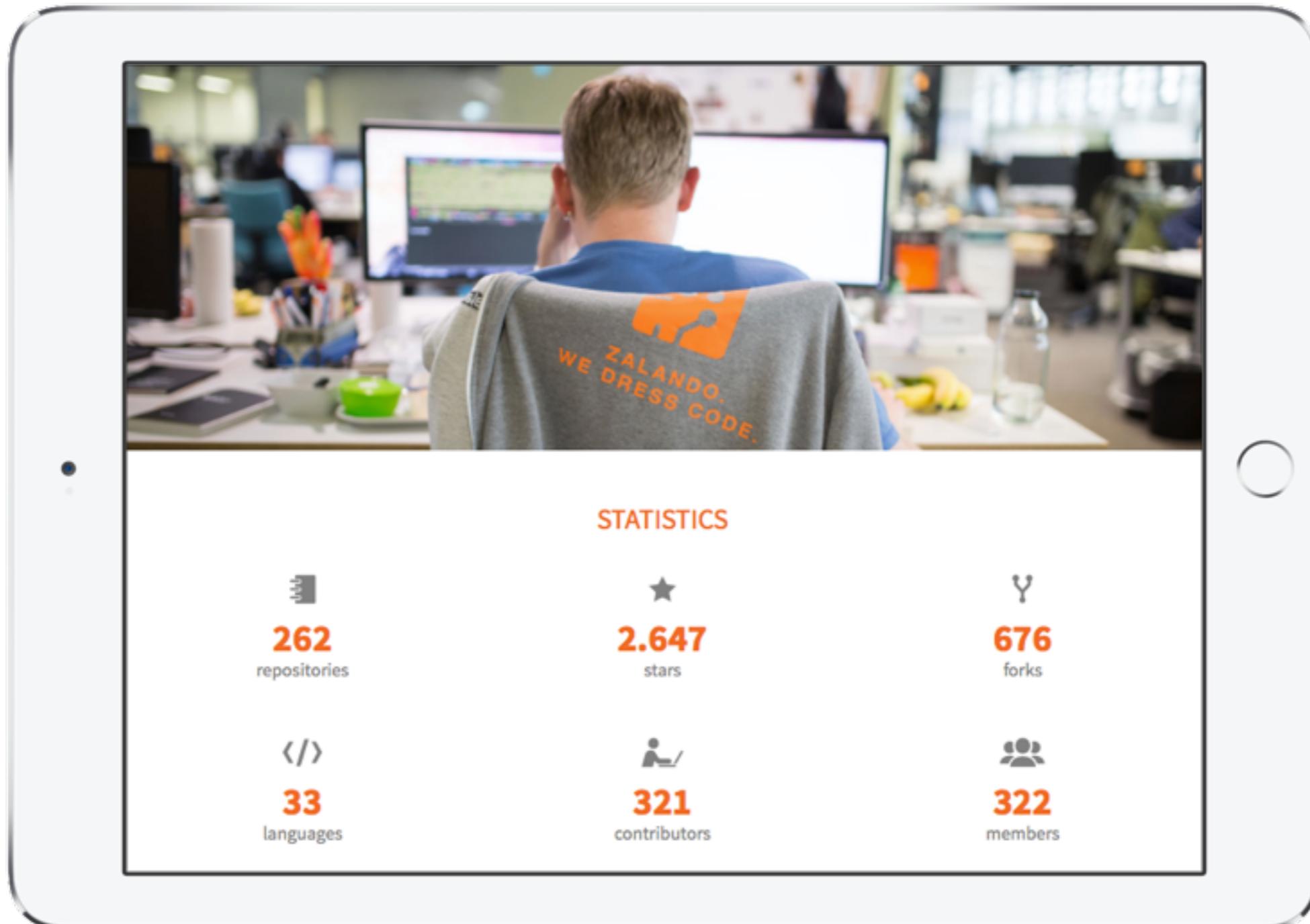
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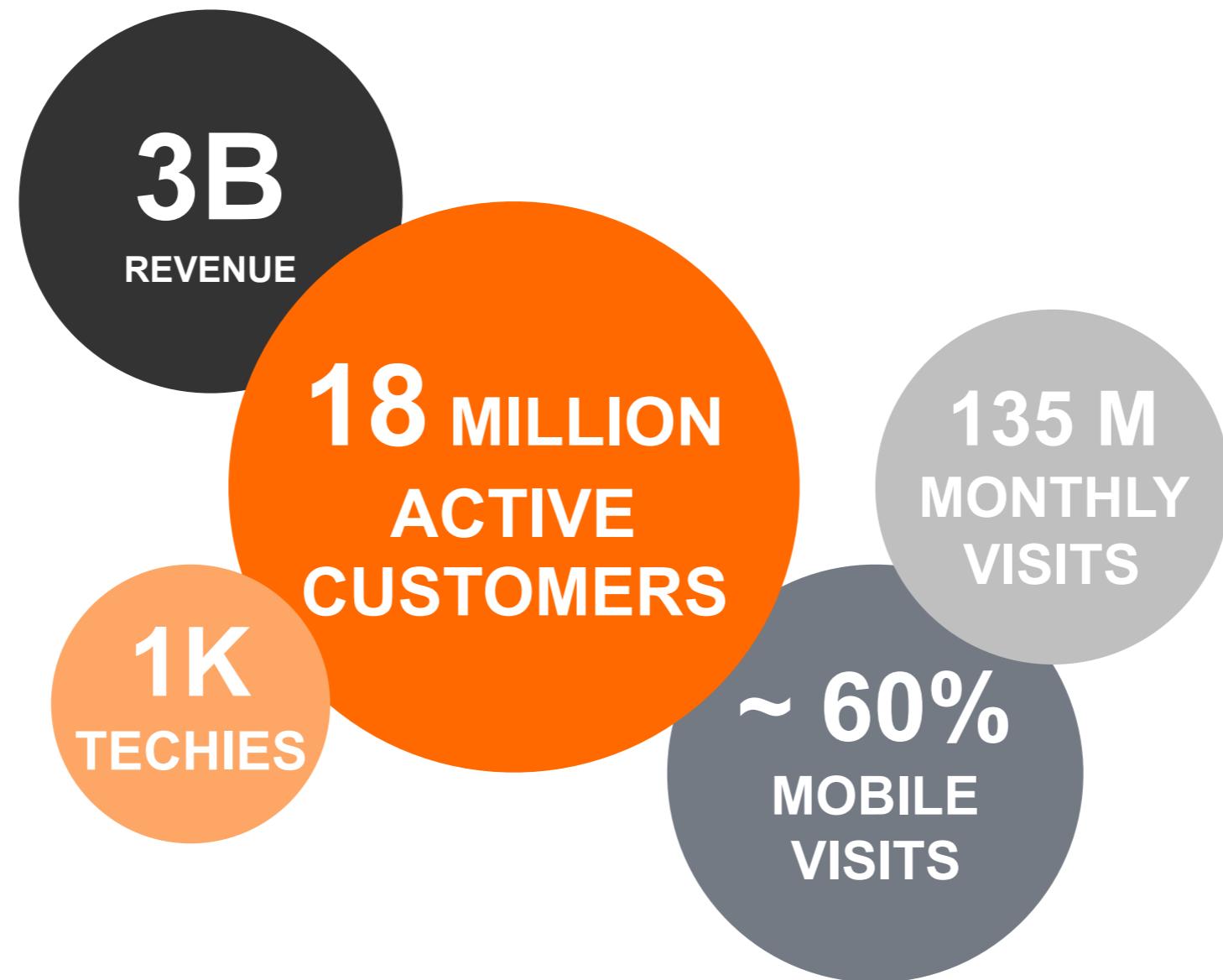
ABOUT ZALANDO



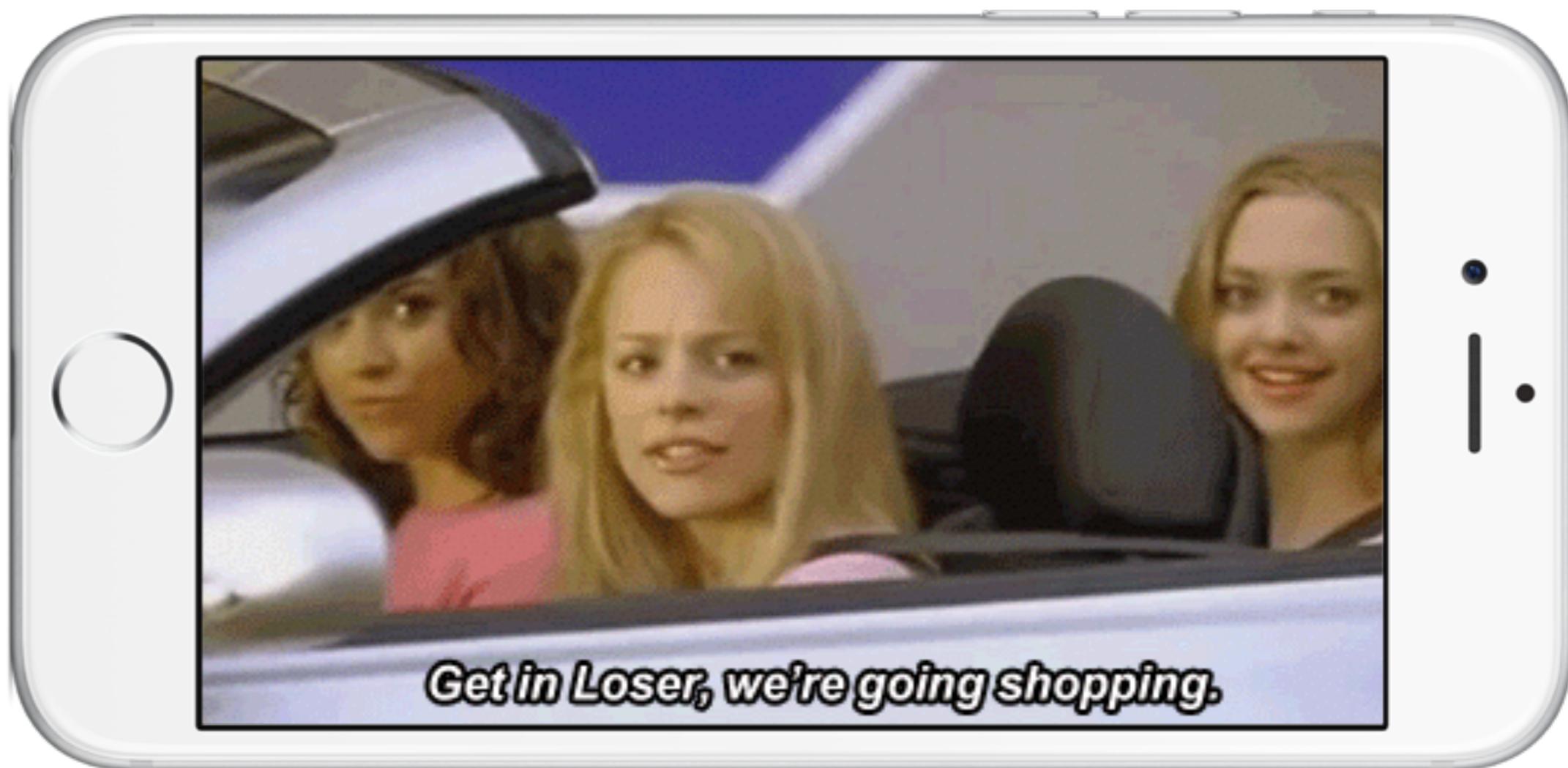
ZALANDO.GITHUB.IO



ABOUT ZALANDO



I NEED A PAIR OF TRAINERS



I NEED A PAIR OF TRAINERS

The screenshot shows the Zalando website interface. At the top, there are links for 'FREE HELPLINE 0800 472 5995', 'FREE DELIVERY & RETURNS', and '100 DAY RETURNS POLICY'. The navigation bar includes 'WOMEN', 'MEN' (which is selected), and 'KIDS'. The Zalando logo is centered above a search bar containing the text 'trainers'. To the right of the search bar are 'My Account', 'Wish List' (with a notification icon), and 'My Bag'.

The main content area displays a sidebar with categories: Shoes, Clothing (selected), Sports, Accessories, Premium, and Sale. Below this is a section titled 'Men's shoes, fashion & accessories' with a descriptive paragraph about men's fashion evolution. The central search results area shows 'trainers 3185 products' with filters for Brand, Colour, Price, Size, Material, and Collection, and a 'New products' dropdown. The sorting option 'Most popular' is selected. A page navigation bar indicates 'Page 1 of 43'. Below these are buttons for 'Women (2819)', 'Men (3185)' (which is highlighted in red), 'Kids (1461)', and 'More from SALE %'. Three Nike trainer shoes are displayed as examples: a dark blue low-top, a black high-top, and a white low-top.

I DON'T NEED A PAIR OF TRAINERS
I NEED THE 😍 PAIR OF TRAINERS

2667

WOMEN
TRAINERS

3184

MEN
TRAINERS

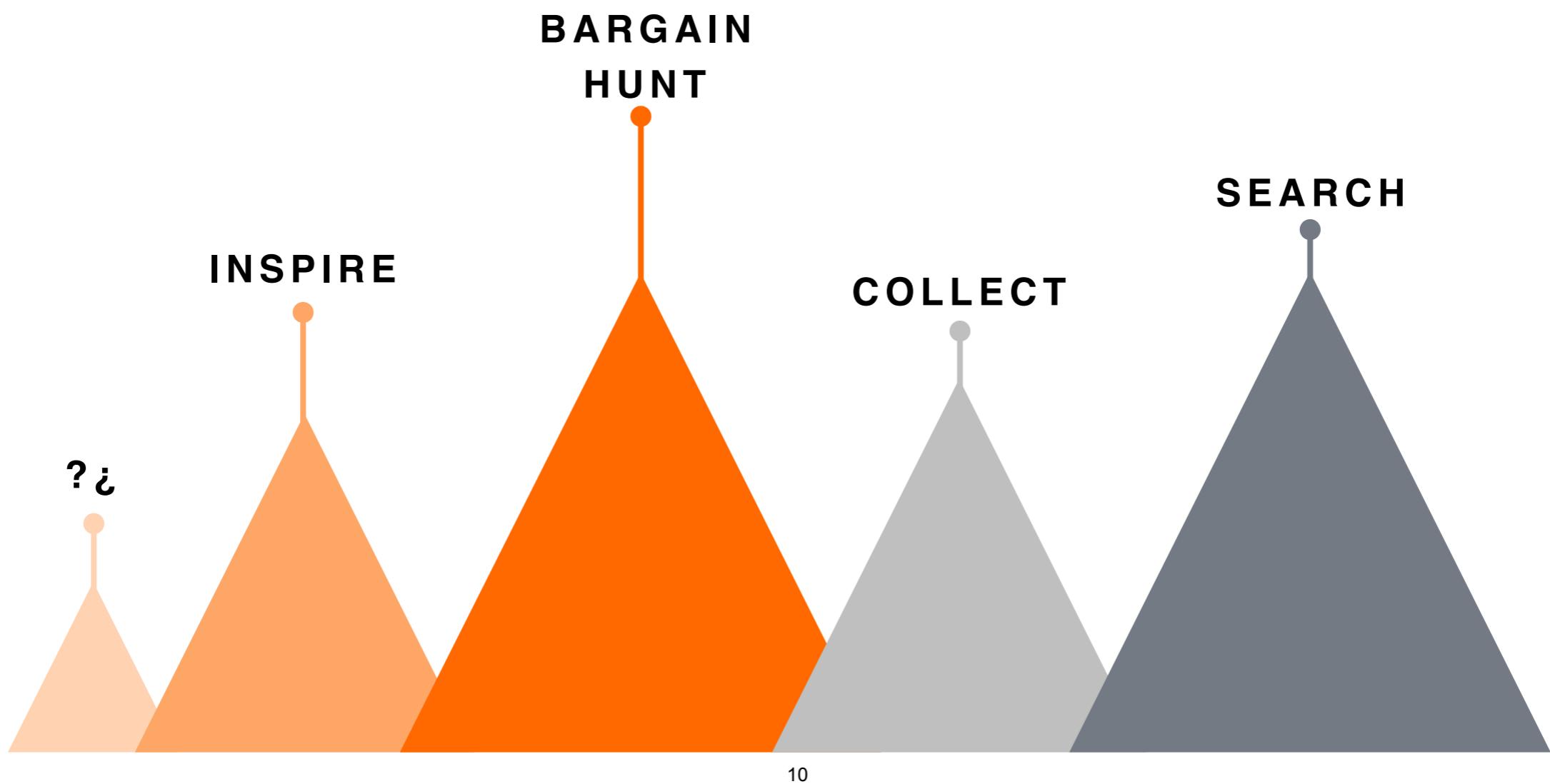
1403

KIDS
TRAINERS

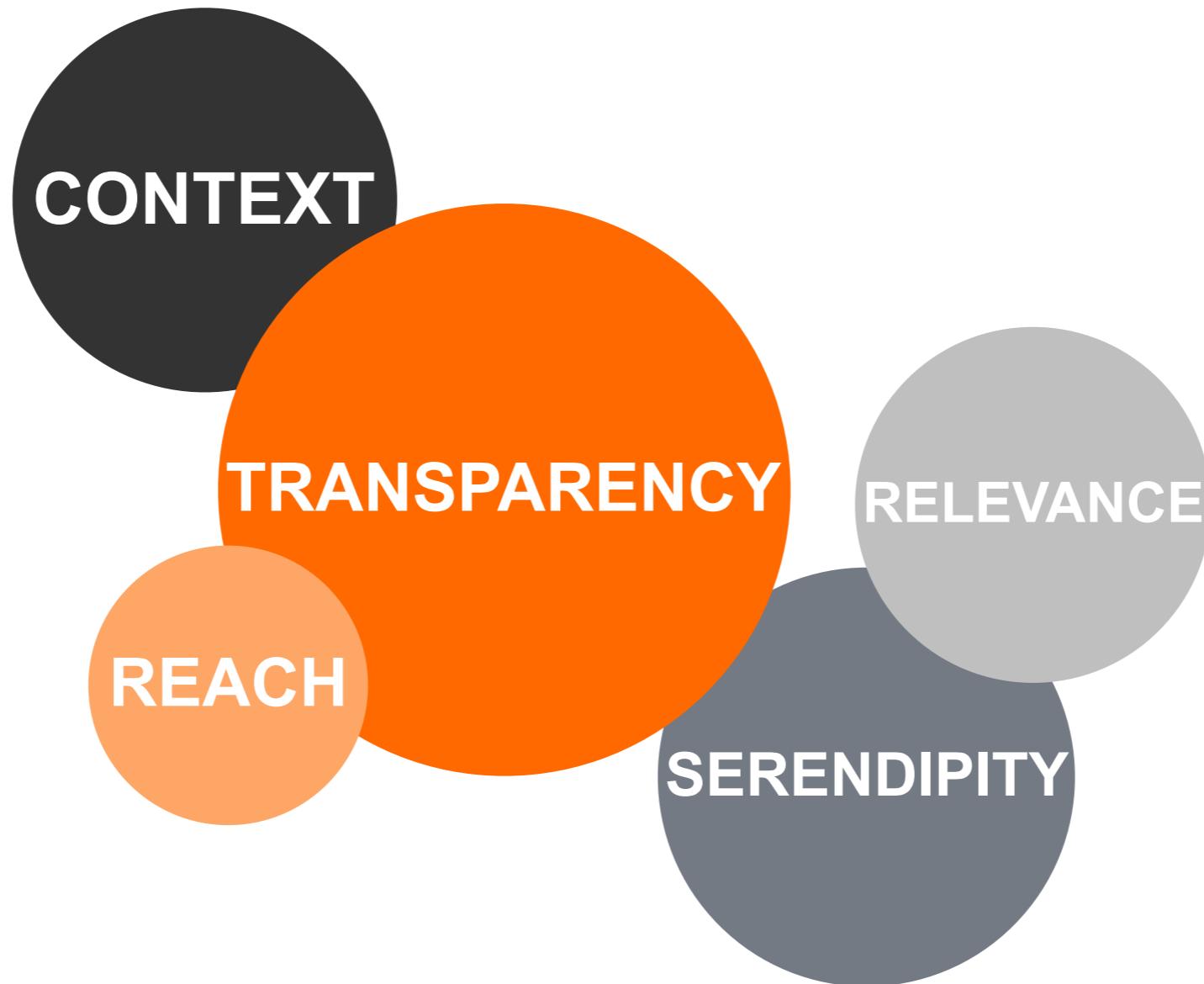
SOME TRAINERS I LIKE ...



RECOMMENDATIONS ARE IMPORTANT



RECOMMENDATIONS ARE IMPORTANT



If you like the beatles you might like....: a tutorial on music recommendation (MM'08)

human-curated
recommendations

MONOCRHOME

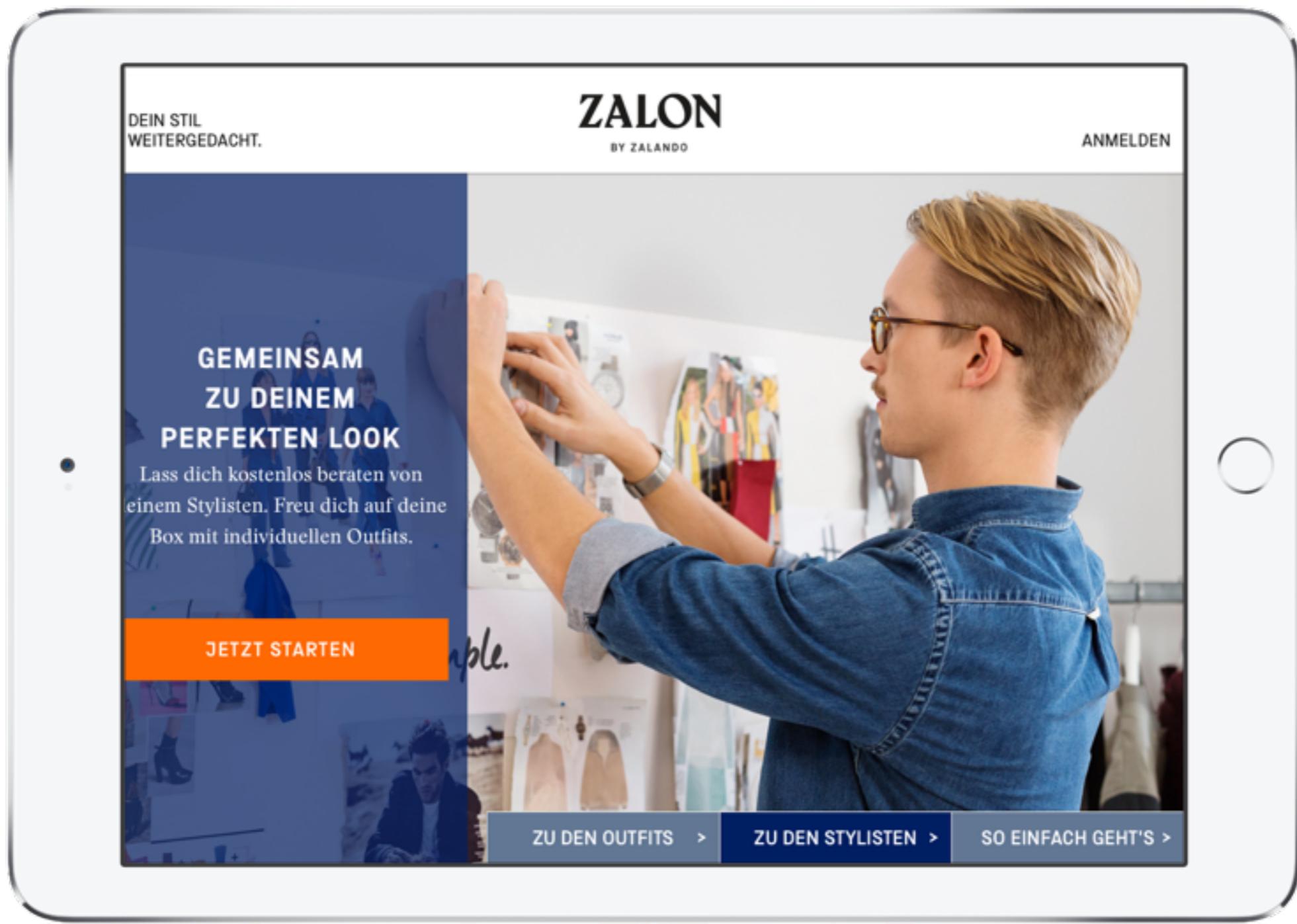
GRAYSCALE

COMFY SHOES

ADIDAS
NIKE
VANS

TRENDY SHOES

CLASSIC
SHAPES



ZALON

HUMAN-CURATED RECOMMENDATIONS



1

ZEIGE UNS
DEINEN STIL



2

DEIN STYLIST
WÄHLT AUS



3

PROBIERE ENTSpannt
ZU HAUSE



4

GEFUNDEN:
DEIN PERFEKTES OUTFIT

machine recommendations:
content based
recommendations

DESCRIBING THE ITEMS

CATEGORY: SHOES – TRAINERS

BRAND: NIKE, ADIDAS

SIZE: 40.5 (NOT 40, NOT 41)

COLOR: GRAY , BLACK, WHITE, MONOCHROME

PATTERN: POLKA DOT

UPPER MATERIAL: TEXTILE / SYNTHETICS

INTERNAL MATERIAL: TEXTILE

SHOE FASTENER: LACES

SEASON: SS2016

TRENDS: URBAN, FASHION X SPORTS



DESCRIBING THE CUSTOMERS

CATEGORY: SHOES – TRAINERS

BRAND: NIKE, ADIDAS, VANS, PUMA

SIZE: 40.5, 41

COLOR: GRAY , BLACK, GREEN, RED, SILVER,

PATTERN: NONE

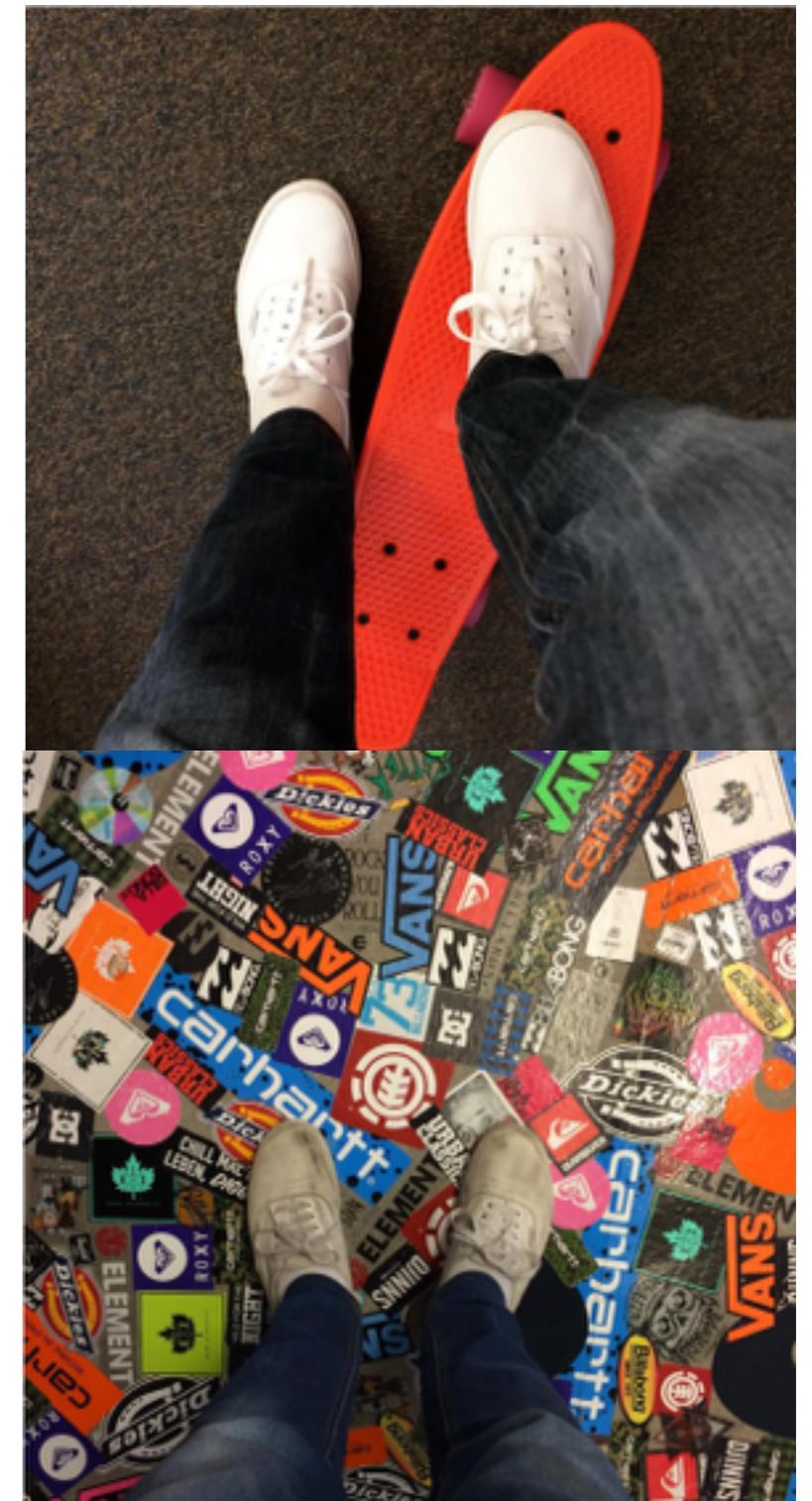
UPPER MATERIAL: TEXTILE / SYNTHETICS, LEATHER

INTERNAL MATERIAL: TEXTILE, VEGAN LEATHER

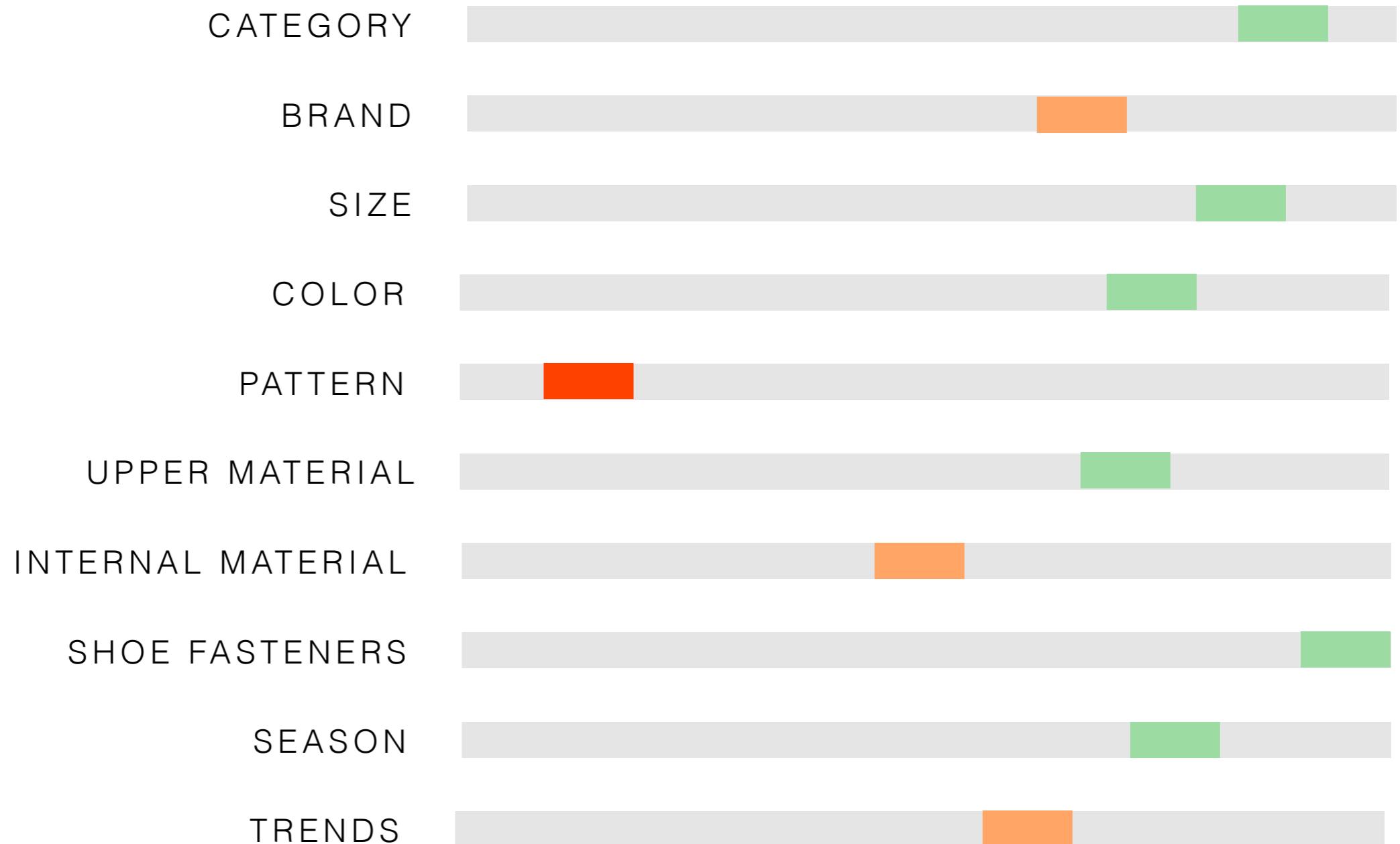
SHOE FASTENER: LACES

SEASON: SS2016, SS2015, AW2015

TRENDS: URBAN, MINIMALISM, SKATE



MATCHING PEOPLE WITH FASHION CONTENT-BASED RECOMMENDATIONS



MATCHING PEOPLE WITH FASHION CONTENT-BASED RECOMMENDATIONS

PROS OF CBF

- No need for explicit user feedback
- Can recommend items as soon as they are introduced in the shop
- Very transparent and allows for *explanations*
- Good for *finding*

CONS OF CBF

- Need for rich metadata
- Not diverse or novel recommendations
- Not great for *discovery*

machine recommendations:
collaborative
recommendations



<https://www.zalando.co.uk/women-street-style/>

<https://www.zalando.co.uk/men-street-style/>

DATA REPRESENTATION

Anna		1	...	1		3		1
Justin				...		4		2
.
.
.
April	5		...			10		2
Ellen	1	1	...			2		
Javier		1	...		1			

FINDING CUSTOMERS SIMILAR TO YOU

Anna		1	...	1		3		1
Justin			...			4		2
.
.
.
April	5		...			10		2
Ellen	1	1	...			2		
Javier		1	...		1			

FINDING ITEMS SIMILAR TO THE ONES YOU LIKE

Anna		1	...	1		3		1
Justin				...		4		2
.
.
.
April	5		...			10		2
Ellen	1	1	...			2		👍
Javier		1	...		1			

COLLABORATIVE RECOMMENDATIONS

PROS:

- Very accurate recommendations
- Diverse recommendations
- Good for discovery and inspiration

CONS:

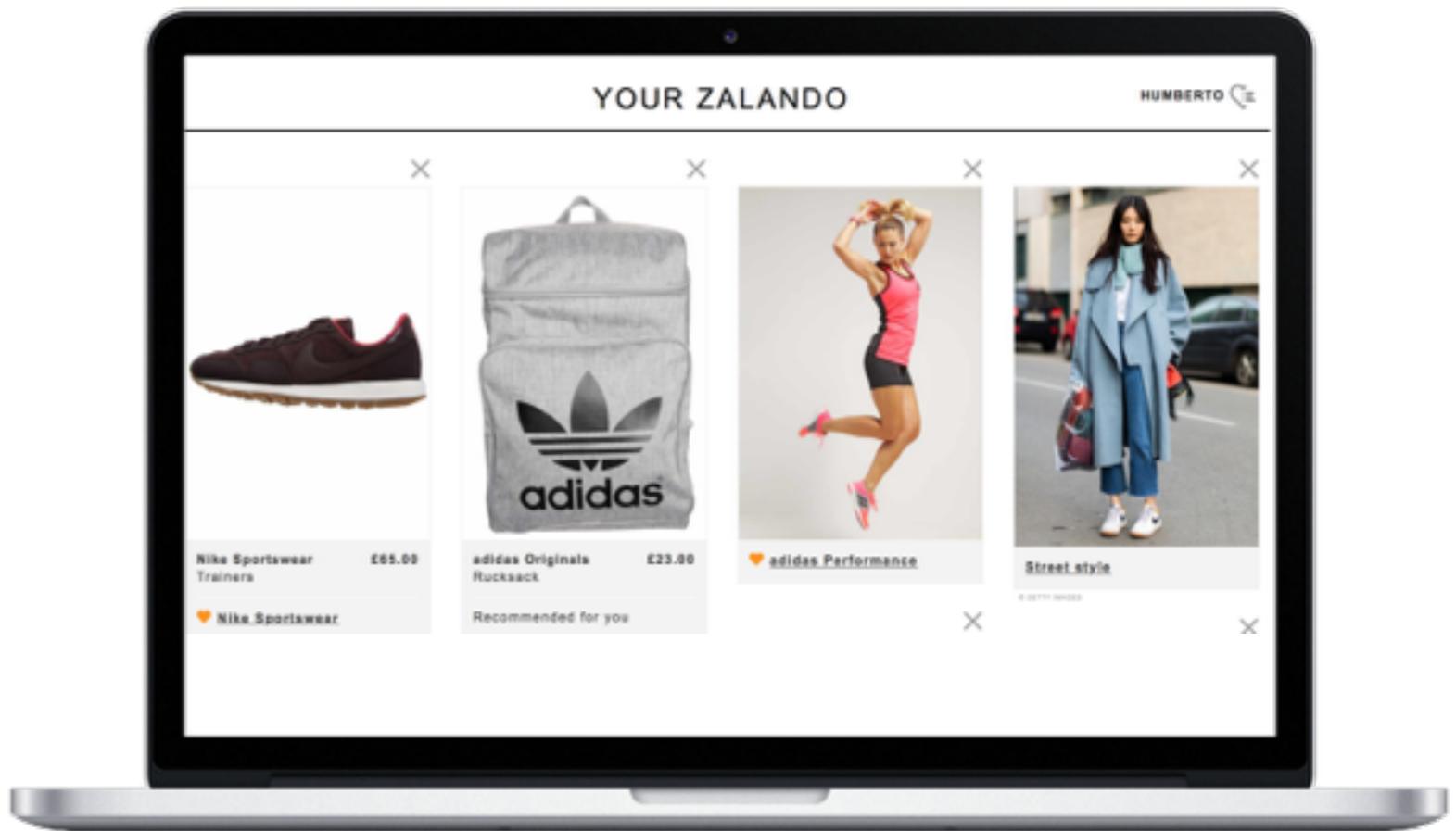
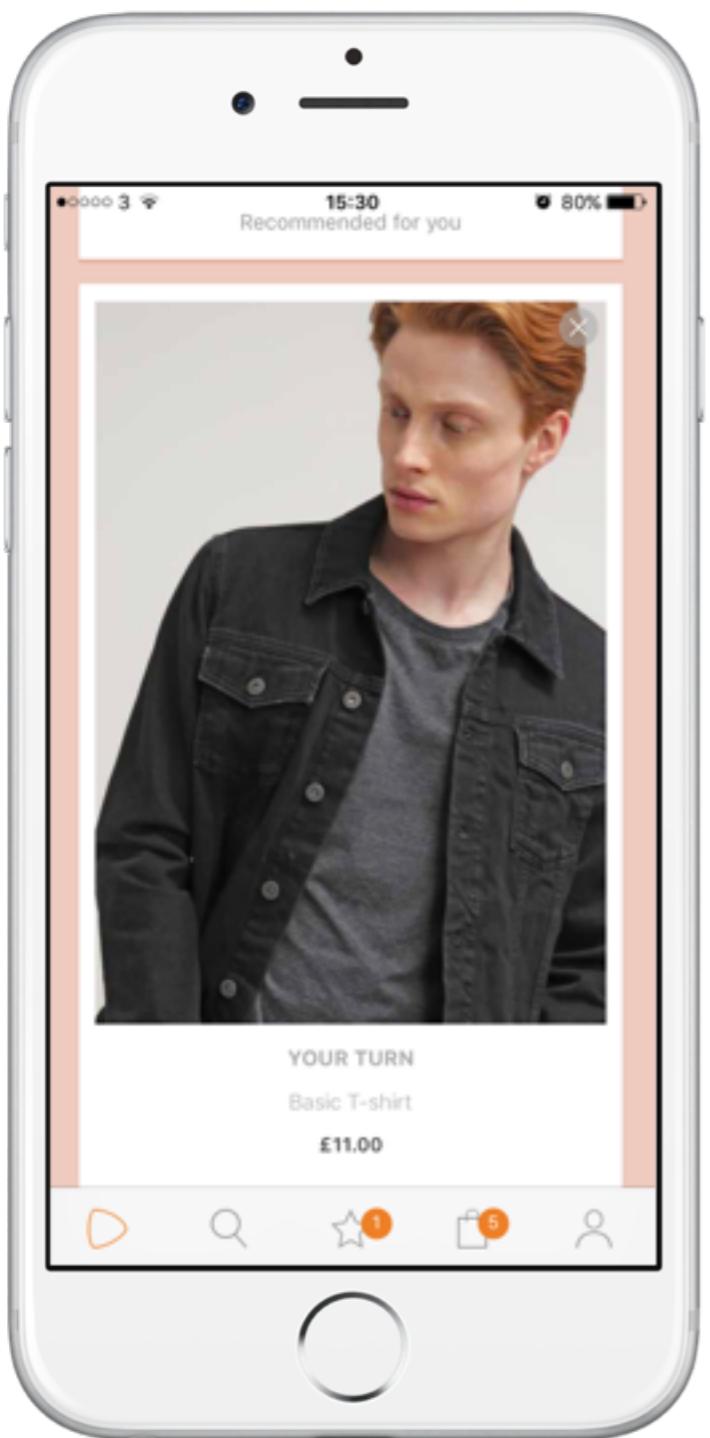
- Harry Potter effect
- Lonely Wolf effect
- Cold-start problem (for products and customers)

context



context
is queen

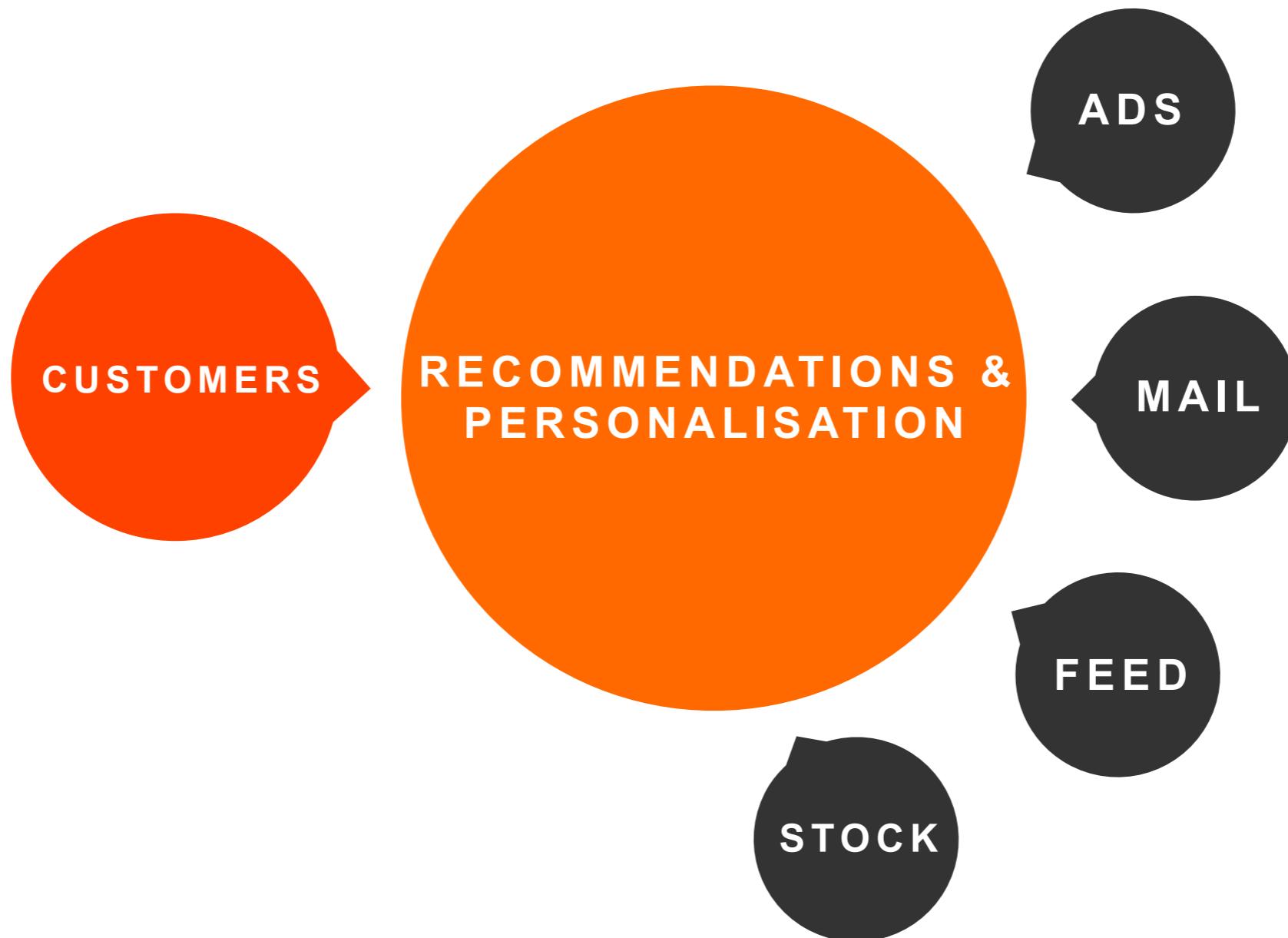
CONTEXT: MOBILE OR DESKTOP?

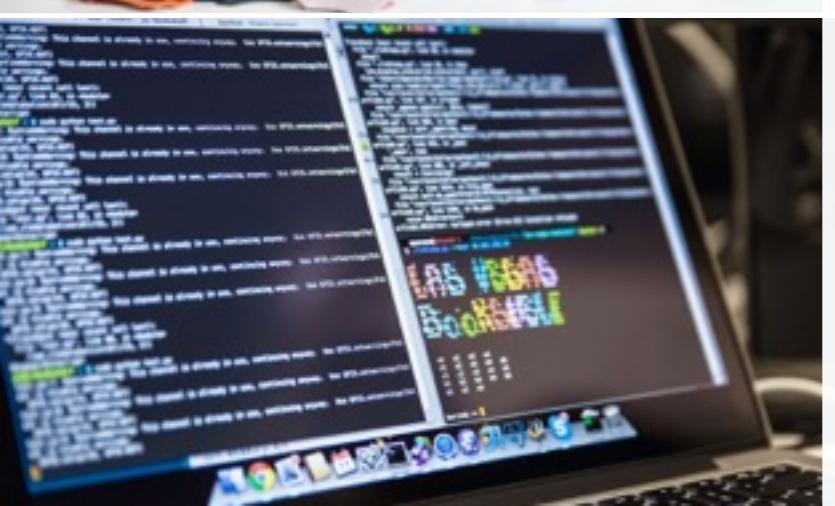


CONTEXT - SEASON, WEATHER, LOCATION



RECOMMENDATION AND PERSONALISATION, OTHER APPLICATIONS





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